

REPLACEMENT ABSTRACT OF THE DISCLOSURE

Methods and apparatus for marking digital material and for detecting marks therein. For mark detection, the material is divided into a plurality of blocks, to which a non-collision resistant compression function is applied. Compression outputs are placed in a shift register, whose value is tested for predetermined values or patterns. Mark embedding may be performed by modifying the data (for example by altering low-order bits and other non-critical regions) such that the outputs of the compression operation, when used as an input to the shift register, yield a predetermined value or pattern. A Hamming Majority operation, computed as the most common bit in a block, may be used as the compression operation, enabling marking and mark detection with material of virtually all types and formats. Mark detection technology may be implemented in media writers and other devices to determine whether the digital material is copyrighted or otherwise protected. An override capability is provided to allow authorized parties to bypass the protection.